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(54) Title: METHOD FOR INHIBITING THE CRYSTALLIZATION OF BORIC ACID

(57) Abstract: A method for inhibiting the crystallization of boric acid is provided. Boric acid is dissolved in water and a vitrifying agent, such as an amino alcohol or amino acid, to form an aqueous mixture which is then dried to form a vitreous boric acid-containing residue. This mixture, when applied to a surface and allowed to dry on the surface, forms a vitreous boric acid-containing coating which is readily adherent to the surface, or if allowed to penetrate into a porous substrate, deposits a vitreous boric acid-containing residue within the substrate upon drying. The vitreous boric acid-containing residue provides beneficial properties, including for example improved fire retardancy and biocidal protection, to a variety of materials such as cotton batting, cellulose, and wood and paper products and gypsum wallboard.



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